DOCUMENT RESUME

ED 110 896 95 CG 010 023

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TITLE Changing Teacher Competence Perceptions by Focused Video-Tape Feedback.
SPONS AGENCY Office of Education (DHEW), Washington, D.C.
PUB DATE 26 Mar 75
NOTE 19p.; Paper presented at the Annual Meeting of the American Personnel and Guidance Association (31st, New York, New York, March 23-26, 1975)

EDRS PRICE MF-$0.76 HC-$1.58 Plus Postage
DESCRIPTORS Behavior Change; *Classroom Observation Techniques; *Effective Teaching; Feedback; Inservice Teacher Education; Instructional Films; Peer Groups; *Protocol Materials; Research Projects; *Teacher Behavior; *Video Tape Recordings
IDENTIFIERS *Professional Competence Peer Opinionnaire

ABSTRACT

The study provided teachers with systematic opportunities to: (1) be videotaped in their classrooms; (2) privately view their tapes and receive verbal and written critiques of their positive classroom behaviors; (3) share exemplary segments of their tapes in regularly scheduled teacher inservice group meetings; and (4) view and critique, in the group meetings, the tapes of other teachers. Teachers' professional competence perceptions were defined as the amount of information known and the degree of professional competence accorded to faculty colleagues, as measured by changes in teachers' scores on the Professional Competence Peer Opinionnaire (PCPO). Significant gains were observed in the amount of information known about the professional competence of the faculty colleagues and in the degree of professional competence accorded to faculty colleagues at the conclusion of the study. The study concluded that teachers are interested in enlarging their effective teaching behavior repertoires. Further, when teachers have opportunitites to observe and adopt productive techniques utilized by their colleagues, the professional competence they ascribe to their colleagues and the amount of information they have concerning the professional competence of their colleagues will be increased. Focused videotape feedback teacher inservice training is believed to provide such opportunities. (Author)

CHANGING TEACHER COMPETENCE PERCEPTIONS

BY FOCUSED VIDEO-TAPE FEEDBACK

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1975 APGA Convention
New York, N. Y.
Division: Research
March 26, 1975

New York Hilton
Lorenz Hart Room
2:15 - 3:30 P.M.

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Competence, or "an organisms capacity to interact effectively with its environment" (White, 1965) is a highly motivating force for either productive or counter-productive behavior. For example, a high sense of competence predisposes individuals toward risk taking encounters which increase their knowledge of, and ability to deal effectively with their environments (White, 1963). In effect, the rich will get richer. Nevertheless, even individuals with a low sense of competence are anxious for, and will seek out more information with which to judge themselves and their interpersonal relations (Havelock, 1969).

Under certain circumstances individuals will be able to assimilate new information even if it contradicts their own perceptions of their competence. The critical factor in their decision-making process seems to be the degree to which their basic attitudes, values, and needs are aroused. The literature is not definitive regarding conditions of arousal but there is considerable evidence to suggest that individuals greatly desire feedback concerning their behavior and are able to rationally evaluate the new information within the context of their own need structure (Havelock, 1969).

The present study was an effort to examine the propositions discussed above as they might relate to the professional competence perceptions of elementary school classroom teachers. It was felt that the feedback teachers

receive concerning their classroom behavior is limited and thereby limiting. It was also felt that teachers themselves are a critical resource for professional competence feedback but that they have few opportunities to receive from or provide their colleagues with, feedback on their effectiveness.

Low teacher visibility tends to deny teachers opportunities for observing or learning about the professional competence of themselves or their colleagues. In addition, differential standards of competence tend to deny them both an understanding and an appreciation of their colleagues effective teaching behaviors. Therefore, some teachers could be unduly accorded low professional competence merely because their work was not visible (Geer, 1966; Wayland, 1964) or because their evaluative standards were particularistic and not commonly shared by their colleagues (Smith & Sandler, 1974).

For these reasons, it was felt that systematically interpreted opportunities for teachers to receive positive feedback regarding their professional competence should be provided if they were to increase their knowledge of, and ability to deal effectively with their environments. Moreover, it was felt that elementary school counselors, as consultants to teachers, could provide such opportunities (Dinkmeyer & Carlson, 1973). Therefore, it was reasoned that if opportunities for teachers to observe and critique their colleague's positive classroom interactions with respect to a shared standard were increased then the professional competence they attributed to one another would also be increased.

THE PROBLEM

What is the effect of focused video-tape feedback on the Professional Competence Peer Opinionnaire scores of teachers?

Specifically, the study asked if an inservice training program of systematically interpreted opportunities for teachers to examine certain of their own and their colleagues' classroom behaviors would influence the amount of

information known and the professional competence accorded their teaching colleagues. The study was also concerned to observe the impact of the intervention attempt in the presence of feedback which focused on positive classroom behaviors only.

METHOD

The study* was conducted in an Augusta County, Virginia elementary school. The school served a pupil population of 714 in grades K-7. They were predominantly white children of rural, skilled and unskilled parentage having a socio-economic status of low-middle to low.

Subjects

The teaching faculty was all white and included five males and fourteen females whose number of years of teaching experience ranged from 1 to 32. All but one held a baccalaureate degree and of these two also held a master's degree. The age range was 22 to 60 with the majority (10) in the twenty year age group.

The subjects were divided into two groups with each group representing each of the grade levels from 1-7. Each group met during the school day for a total of 16 one hour sessions, two each month from October through May of the 1973/74 school year. The Project Director and an advanced doctoral candidate assisted the counselor in the teacher inservice meetings.

The Instrument

The Professional Competence Peer Opinionnaire (Ball & Getson, 1973) was utilized to measure the perceptions of teachers regarding the amount of information known about the classroom behaviors of, and the degree of professional competence accorded to, their faculty colleagues. Since the instrument was

*The study was part of a three year Nationally Validated Title III, ESEA Project which received the President's National Advisory Council, "Educational Pacesetter Award", July, 1974 and the National Association of State Advisory Council Chairmen, "Excellence in Education Citation", December, 1974.

constructed specifically for this study, no validity or reliability data were available at the time of the administration. On the other hand, the instrument does appear to possess face validity.

Teachers were asked to rank the professional competence of their teaching colleagues on a five point scale, and also to indicate the amount of information they felt they possessed about the teacher at the time of the rating. A three point rating scale was employed for this latter response with 1 indicating no information, 2 some information, and 3 indicating sufficient information to justify the rating.

For example:

	Not Effective				Very Effective	Amount of Information		
Name	1	2	3	4	5	1	2	3
Teachers' names alphabetical by grade level								

Procedure

Several propositions guided the formulation of the teacher inservice activities. For example, it was assumed that the teachers should: (1) understand and identify with a common set of evaluation criteria (McDonald & Allen, 1967; Salmon & McDonald, 1970; Schein & Bennis, 1965; Staines, 1969); (2) be able to see one another in the act of teaching (Smith & Sandler, 1974); and (3) be provided prompt feedback (Borg, 1972) which is positive (Krumholtz, 1965; Skinner, 1953; Thoresen, 1966) initially private (Perlberg & O'Bryant, 1968) but ultimately shared with the colleague group.

The literature describes two categories of competence, namely, instrumental or task competence (Bridges, 1968) and expressive or interpersonal competence (Argyris, 1962; Foote & Cottrell, 1955). The latter, which is concerned with how effectively a teacher relates to the attitudes, feelings, and values of

students seemed a more appropriate consultation focus for counselors. Therefore, in response to the first criterion mentioned above a descriptive list of affectively oriented "positive classroom behaviors" was constructed. Included were four categories of situational descriptors and specific behavior examples; Alerting, Positive Reinforcement, Accountability, and Active Participation. The summary listing of "Positive Classroom Behaviors" was constructed from the literature which speaks to effective classroom learning climates (Derr, 1969; Dimitroff, 1969; Henry, 1957; Kagan, 1969; Kounin, 1970; Leacock, 1969; Medley & Mitzel, 1963; Rist, 1970) and from the video-tapes of classroom teachers in other settings (Brown, MacDougall & Jenkins, 1972; Brown & MacDougall, 1973a; 1973b). For example:

I. GROUP ALERTING

Those techniques, both verbal and non-verbal, used by teachers to keep the children "on their toes" and engaged in the lesson - an aura of suspense, surprise and excitement (Kounin, 1970).

A. VERBAL:

1. Creates an aura of suspense before calling on a child.

   e.g. "Let's see, now, who can _____."
   "Oh, this is a tricky one _____." "Be careful _____."

2. Asks question - pauses, looks around the room, pauses and then selects the reciter.

   e.g. "How many know what this word is?" "John?"

3. Calls on different children frequently.
   (Almost every child in the class is included in the recitation.)

4. Asks question, then selects a reciter.

   e.g. "What are they looking for, John?"

5. Alerts non-reciters that they might be called on next.

   e.g. "Listen carefully everyone. You may be called on next."

6. Changes pace by varying the recitation format.
   (Intersperses "mass unison responses" with "individual responses".)

7. Changes the pace of the lesson by varying the focus of attention.

   e.g. Prop switching from the blackboard to balloons to musical instruments, etc.

B. NON-VERBAL:

1. Teacher alerts class with her eyes, hands and body.

   e.g. Smiling, vocal intonation, expressive use of eyes, leans forward, walks around the room.

2. Shows excitement for the lesson through her own facial expressions (smiles, cocks head, expressive use of eyes), vocal inflection, and body gestures (leans forward, cups ear).

II. POSITIVE REINFORCERS

Those behaviors, verbal and non-verbal, which communicate a genuine concern and unconditional positive regard for the child. Skill in communicating not only that the child's responses are important but that he himself is (Brown, MacDougall, 1973a & b; Dimitroff, 1969; Henry, 1957; Leacock, 1969; Rist, 1970).

A. VERBAL:

1. Gives positive reinforcement by the quality of responses made to the group or to an individual child.

   e.g. "Fine, you've done well this morning."
   "Very good!"
   "You're all so bright!"
   "I like the way you're all working."

2. Gives undivided attention and accepts the tentative strivings of each child.

   e.g. "That's an interesting way of looking at it. I'm pleased you shared it with us."

3. Probes encouragingly a child's response for more definitive responses and elaboration of problem.

   e.g. "Good! What else?" "And what else?" "And how would that be?"
   "Come on now, I know you can figure this one out."

B. NON-VERBAL:

1. Facial expressions, the way the eyes are used as well as the hands, warmth of personality, sense of humor, patience and understanding, enthusiasm and excitement.

   e.g. Looks around the group expectantly, listens attentively while each child responds, leans down to help individual children, smiles, touches.

2. Proceeds with the lesson despite disruptive behavior on the part of one or more children in the class. Does not interrupt self or others as she indicates appropriate behavior to the disturbing child.

   e.g. Walks over to child, guides him back to his desk, stands next to him until he is re-engaged in the recitation.

   Walks over to child, places arm around him, and stands with him as lesson proceeds.

III. ACCOUNTABILITY

Those techniques of teachers which hold children responsible for their task performances during recitation sessions - systematic monitoring of tasks to communicate an awareness of what the children are actually doing (Kounin, 1970).

A. VERBAL:

1. Holds entire group accountable for an individual child's response.

   e.g. "What has John taught us?"

2. Requires children to produce and demonstrate work done independently while the same task is being accomplished by other children at the board.

   e.g. "Hold up your papers so I can see them? Did we all get the same answers that are on the board?" (Scans room and all work sheets checking the products.)

   "Everybody write down the number which tells us how many sticks are in the set. Now, hold up your papers!"

3. Includes other children in the performance of a reciting child.

   e.g. "What do you think of what he just told us?"

   "How do you feel? Do you agree with Susan?"

   "We must listen carefully, now. One of us will be asked to talk about his answer."

4. Structures the problem so that the children know what to look for in the lesson.

e.g. "This story is about some of the simple machines invented by man. See if you can discover some of these inventions."

B. NON-VERBAL:

1. Pretends to be listening to each individual child's response when class answers in unison.

   e.g. Leans forward, cups ear -- "I can't hear you, Mary."

2. Circulates and checks seatwork being done while the same task is being performed at the board.

IV ACTIVE PARTICIPATION

Those techniques used by teachers to increase the active participation of all members of the group. Encourage children to formulate and express opinions of their own. All answers are acceptable, the pattern of interaction is more pupil-pupil than teacher-pupil. Creates an open, non-judgmental environment in which no child is afraid to particpate (Brown & MacDoughall, 1973a & b; Derr, 1969; Dimitroff, 1969; Leacock, 1969; Medley & Mitzel, 1963; Rist, 1970).

A. VERBAL:

1. Asks open-ended questions and examines a number of different answers rather than requiring one "right" answer.

   e.g. "How do you think we got air on the table?"
   "Why do you think outlining could help us?"
   "How do you feel the invention of the printing press has helped us?"

2. Mistakes and tentative strivings of a child are utilized for constructive learning.

   e.g. "Well, it's like a harmonica. But feel it again."
   "Yes, you're right, but I was thinking of something else."
   "That's an interesting fact, but _____".

3. Includes the answer in the question in an effort to reduce the chance of failure and increase the child's opportunity for success.

   e.g. "Is this word 'mop' or 'map'?"
   "What color is this ball? Red or Blue?"

4. Gives clues verbally to minimize chances of answering incorrectly and involve more children in the lesson.

   e.g. "It starts with a 'p'."
   "They're round and made of metal."

5. Makes lesson concrete by relating it to the personal lives of the children.

   e.g. (a lesson on the use of a map) "Now let's pretend we're all going on a trip. If we start here where are we going to stop for lunch, where will we have dinner and where will we spend the night?"

6. Creates lessons which involve the children in some physical activity.

   e.g. A lesson in multiplication facts interpreted through marching, cheerleading, chanting, singing, etc.

7. Rephrases questions in a limitless variety of ways. Feeds in more and more information in an effort to make greater group participation possible. Reluctant to let a question go until almost every child is able to know what in fact the question is asking.

   e.g. "How is water vapor formed?" If we boiled water on the stove what would eventually happen to it? Would it stay in the pot?"

B. NON-VERBAL:

1. Clues children into appropriate responses with lips.

   e.g. Forms vowel sounds with mouth.

2. Gives clues with hands.

   e.g. ("It goes this way.") Makes a circle in the air with hands.

At the first teacher inservice session copies of the "Positive Classroom Behaviors" were given to each teacher. The descriptors and the behaviors were examined and discussed as common ingredients of their own classroom behavior repetoires. It was explained that the behaviors were not unknown to them but that documented evidence of the effectiveness of the behaviors might be. For

example, they were told that as teachers they often operated in a feedback vacuum in which there were few opportunities for them to learn how effective their classroom interactions actually were. This, then, was to be the purpose of their inservice activities; to identify and examine their strengths in terms of the described behaviors.

The teachers were also told, in response to the other two criteria that a feasible mode for examining their positive classroom behaviors was video-tape. Their participation would be on a voluntary basis and their tapes would be critiqued by the counselor but would be viewed by no one except themselves. All nineteen teachers were video-taped in their classrooms three times during the school year (October, January, and March) at a time of day designated by each and each taping was of a thirty minute duration.

As each tape was reviewed for the specified positive classroom behaviors it and a written critique were shared with the teacher in a private session which terminated with a request that the relevant portions of the tape be shared with colleagues in the next inservice session. Equivalent positive segments were then edited from the original tapes and were shown to the colleague group. It should be noted that only two teachers ever refused. These teachers continued to volunteer for classroom video taping but they were unwilling to have their tapes shown in the inservice group sessions. The discussion procedure differed from first to third tapings. For example, in October after each teacher's tape segment was viewed in the inservice group session the counselor would identify and discuss the positive behaviors the teacher had demonstrated with reference to the list of behaviors given to the teachers. In January, the teacher's colleagues were asked to critique the tape segments and the counselor supplemented and summarized the various critiques for each segment. The same procedure was followed in March except that in those viewings each teacher was

asked for a self-critique before the counselor summarized the segment.

All 19 teachers were administered the Professional Competence Peer Opinionnaire in Octob uring the initial teacher inservice session. Re-administration of the instrume c occurred in May at the final teacher inservice training session.

RESULTS

A correlated t test was used to determine any mean changes from pre to post test in the two performance variables, professional competence rating accorded and amount of information known. Changes were deemed significant at the .01 level of significance.

As can be observed from Ta le I significant increases were reported from pre to post test for both the professional competence rating ($t = 12.68$, $p < .000$) and the amount of information known ($t = 3.54$, $p < .002$). In addition, observations of each teacher's three video tapes (October, January, and March) indicated a generally positive trend in the frequency of "positive classroom behaviors." It would appear that the teacher inservice activities were responsible for the observed changes. Evidence for this assertion is that prior to the introduction of the inservice activities, the teachers involved had been interacting with each other no less than two years. Therefore, it was felt that any changes due solely to normal professional interactions should have been observed previous to the introduction of the inservice activities.

TABLE I

Means for Competence Ratings and Amount of Information

Variables	N	Pre Test	Post Test	t Value	2 tailed Probability
Competence Rating	19	3.6737	4.0789	12.68	.000
Amount of Information	19	1.7737	1.9632	3.54	.002

DISCUSSION AND IMPLICATIONS

The major assumption guiding this study was that teachers want and need feedback concerning their professional competence. A collateral assumption was that counselors can respond to this need. The findings of the study seem to confirm both propositions. Seemingly, the professional competence perceptions of teachers are related to the nature of the feedback they receive from their environmental transactions (White, 1965). In the presence of positive feedback only the teachers performed the described positive classroom behaviors, identified their colleagues' performance of them, learned more about the classroom behaviors of one another, and attributed significantly greater professional competence to one another.

If, as has been suggested (White, 1963), a high sense of competence predisposes individuals toward explorations of a wider, unknown and unassured range of their environments, then they may be expected to acquire an ever enlarging repertoire of coping behaviors. This is the ultimate goal of most counselors for their clients but counselors have generally limited the client definition to include only the pupil population and the counselor role interpretation to include only counseling (Hill, 1971). This study attempted to examine not only the efficacy of the described teacher-consultation activity for counselors but more particularly the feasibility of these activities. Seemingly, both criterion measures were affirmed.

The significant gains observed for the teachers' Professional Competence Peer Opinionnaire scores seem to have generated the following propositions:

1. If counselors identify specific examples of positive teaching behaviors, in teacher discussion group settings, then teachers will perform those behaviors in their classrooms.
2. If counselors provide teachers with prompt, positive, videotape feedback in an empathetic, private environment then most

teachers will be willing to share their tapes with their colleagues.

3. If counselors provide group opportunities for teachers to examine video-tapes of their colleagues' positive classroom behaviors, then teachers will attribute more professional competence to one another.

4. If teachers feel more professionally competent they will relate more effectively to the attitudes, feelings and values of their students (Foote & Cottrell, 1955).

In addition, the findings seem to indicate that teachers are interested in enlarging their positive classroom behavior repetoires. For when teachers had opportunities to observe the positive techniques utilized by themselves and their colleagues they increased the frequency of these techniques in their classroom interactions. For these reasons, positively focused video-tape feedback teacher consultation is believed to provide teachers with opportunities for the abandonment of unproductive behaviors and the adoption of autonomous self-sustained learning behaviors (Fuller & Manning, 1973). Finally, if counselors have been deterred from implementing their teacher consultation function due to a lack of formalized or systematic descriptions of this function, then the described program of activities may be of potential utility.

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